

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the reasons that follow.

Rejections Under 35 U.S.C. § 102

Claims 1-3, 5, 6, 8-13, 15, and 17-20

Claims 1-3, 5, 6, 8-13, 15 and 17-20 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,225,546 (Kraft et al.). Applicant respectfully traverses the rejection. Kraft et al. fails to disclose the Applicant's claimed invention as recited in Claims 1-3, 5, 6, 8-13, 15 and 17-20. Applicant reserves the right to swear behind Kraft et al..

Claim 1 recites, in part:

refining the length for the period of recurring events by comparing the first loop with subsequent loops, the subsequent loops having the length of the first loop.

In Section 3 of the Office Action, the Examiner points to Col. 8, lines 1-7 of Kraft et. al. as teaching this claim element. The Examiner argues that the teachings of Kraft et. al. inherently require determination and refining the length of an identified instance of the main melody. Applicant respectfully disagrees. Kraft et. al. fails to disclose or teach "refining the length for the period of recurring events by comparing the first loop with subsequent loops."

Kraft et. al. describes a technique for identifying instances of a main melody. **Identifying a main melody is different from "refining the length."** Kraft et. al. teaches: (1) identifying an instance of the main melody by evaluating note variation and applying harmony rules; (2) using the information obtained to create a summarization hierarchy of the musical piece; and (3) identifying additional instances of the main melody by searching the summarization hierarchy for non-overlapping occurrences of the main melody pattern. Once an instance of the main melody has been identified, however, Kraft et al. does not disclose or suggest any refinement of the

length by comparison with other portions of music. The section cited by the Examiner (Col. 8, lines 1-7) discusses the *detection* of variations based on the duration of notes to *identify* instances of a main melody. Col. 8, lines 1-7 states:

The present invention utilizes beat and notes components to detect variations on the primitive components, e.g., the notes. A first technique, utilized by part component builder 206 is to recognize variation based the duration of notes. Notes are primitive components and belong to a measure. One of their attributes is duration. Duration is measured using a tuple expression (e.g. 1/4, 1/2, etc.).

Again, Kraft et. al. does not disclose a refining length operation which would take place after the identification of an instance of the main melody. The “refining” operation changes the length of the identified loop based on a comparison with subsequent loops. Such an operation is never disclosed or suggested by Kraft et al.

The claims that depend on claim 1 are patentable for at least the same reasons. The dependent claims recite further elements not disclosed by Kraft et al.. For example, in reference to claim 6, the Examiner argues that “Kraft further teaches that the various portions can be of varying length, and it is inferred that the various portions can be of the same length.” Kraft et al. identifies sub-strings that have “non-overlapping occurrences” (see Col. 10, lines 47-50) and can repeat the melody or other parts in a uniformly elongated or shortened manner (see Col. 11, lines 65-67). However, Kraft et al. does not discuss or suggest refining the length **by comparing** portions of a recorded signal having the same length.

Claim 11 recites, in part:

means for refining the length for the period of recurring events by comparing the first loop with subsequent loops, the subsequent loops having the length of the first loop.

Thus, Claim 11 is patentable over Kraft et al. for at least the same reasons given for Claim 1.

Claim 18 recites, in part:

adjust the length for the loop by comparing the loop with subsequent loops, the subsequent loops being defined as portions of the recorded signal having the length of the loop and starting at a point in the recorded signal later in time.

As discussed with respect to claim 1, Kraft et al. never describes adjusting the length of a portion of music (a “loop”) by comparing the loop with other loops. Col. 11, lines 65-67 of Kraft et al. discusses that the melody and other parts can be elongated or shortened, but **there is absolutely no mention or suggestion in Kraft et al. that lengths of loops be adjusted by comparing a loop with other loops.**

A rejection under 35 U.S.C. § 102(e) cannot be properly maintained when the reference does not disclose each and every limitation of the rejected claims. Kraft et al. does not disclose each and every limitation of Claims 1-3, 5, 6, 8-13, 15 and 17-20. Applicants, therefore, respectfully request withdrawal of the rejection of Claims 1-3, 5, 6, 8-13, 15 and 17-20.

Rejections Under 35 U.S.C. § 103

Claims 4, 7 and 14

Claims 4, 7 and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kraft et al. Applicant respectfully traverses the rejection. Kraft et al. fails to disclose, teach, or suggest Applicant’s claimed invention as recited in Claims 4, 7 and 14.

Claims 4 and 7 depend from Claim 1. Claim 14 depends from Claim 11. As discussed above, Kraft et al. does not disclose, suggest or teach “refining the length for the period of recurring events by comparing the first loop with subsequent loops,” recited by Claim 1, or “means for refining the length for the period of recurring events by comparing the first loop with subsequent loops,” recited by Claim 11. These claim elements are also required by Claims 4, 7, and 14.

A rejection under 35 U.S.C. § 103(a) cannot be properly maintained when the reference or references do not disclose, suggest, or teach each and every limitation of the rejected claims. Kraft et al. does not disclose, suggest, or teach each and every limitation of Claims 4, 7, and 14. Applicants, therefore, respectfully request withdrawal of the rejection of Claims 4, 7, and 14.

Claim 16

Claim 16 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Kraft et al., and further in view of U.S. Patent No. 5,734,731 (Marx). Applicant respectfully traverses the rejection. Kraft et al. and Marx fail to combine to disclose, teach, or suggest Applicant's claimed invention as recited in Claim 16.

Claim 16 depends from Claim 11. As discussed above, Kraft et al. does not disclose, suggest or teach "means for refining the length for the period of recurring events by comparing the first loop with subsequent loops," recited by Claim 11. Marx provides no teaching or suggestion about refining length by comparing a first loop with subsequent loops.

Kraft et al. and Marx do not combine to disclose, suggest, or teach each and every limitation of Claim 16. Applicants, therefore, respectfully request withdrawal of the rejection of Claim 16.

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 50-2350. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even

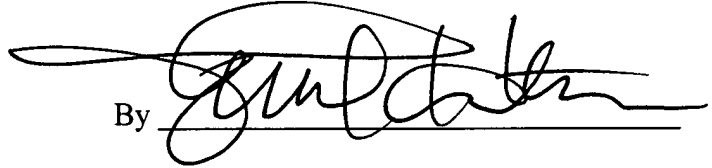
entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 50-2350. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 50-2350.

Respectfully submitted,

Date December 20, 2004

FOLEY & LARDNER LLP
Customer Number: 23524
Telephone: (608) 258-4292
Facsimile: (608) 258-4258

By

A handwritten signature in black ink, appearing to read 'Paul S. Hunter', written over a horizontal line.

Paul S. Hunter
Attorney for Applicant
Registration No. 44,787